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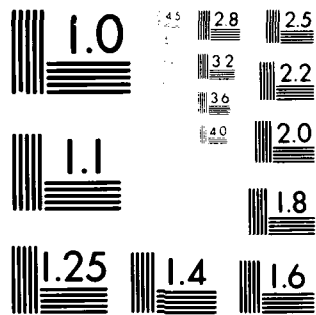
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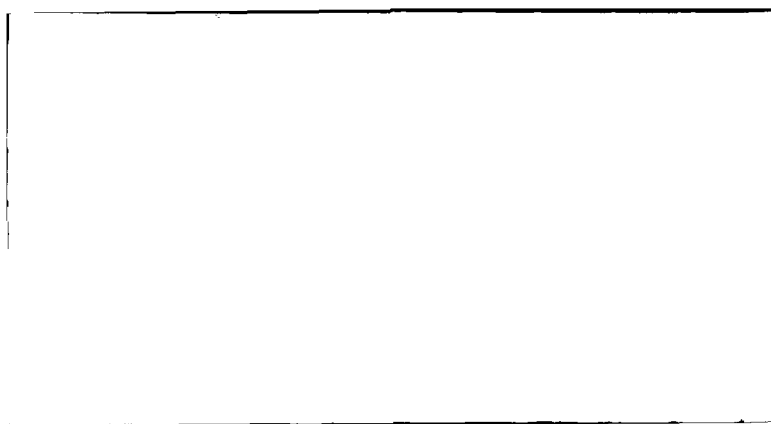
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APPENDIX 31.

COMPETENCY CURRICULUM FOR  
EAR, NOSE AND THROAT ASSISTANT

APPLICATION OF A SYSTEM APPROACH  
U.S. NAVY MEDICAL DEPARTMENT  
EDUCATION AND TRAINING PROGRAMS  
FINAL REPORT

August 31, 1974

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Prepared under Contract to  
OFFICE OF NAVAL RESEARCH  
U.S. DEPARTMENT OF THE NAVY

Quida C. Upchurch, Capt., NC, USN  
Program Manager  
Education and Training R&D  
Bureau of Medicine and Surgery (Code 71G)

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The study objective consisted of a determination of what the health care personnel in the Navy's Medical Department, Bureau of Medicine and Surgery actually do in their occupations; improving the personnel process (education and training); and building a viable career pathway for all health care personnel. Clearly the first task was to develop a system of job analyses applicable to all system wide health care manpower tasks. A means of postulating simplified occupational clusters covering some 50		

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currently designated Navy enlisted occupations; 20 Naval Enlisted Classification Codes (NEC's) were computerized. A set of 16 groupings that cover all designated occupations was developed so as to enhance the effectiveness of professionals and sub-professionals alike.

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## FOREWORD

The project, "Application of a System Approach to the Navy Medical Department Education and Training Programs," was initiated in May of 1969 as a realistic, comprehensive response to certain objectives set forth in ADO 43-03X, and to memoranda from both the Secretary of Defense and the Assistant Secretary of Defense, Manpower and Reserve Affairs. The Secretary's concern was stated in his memorandum of 29 June 1965, "Innovation in Defense Training and Education." More specific concerns were stated in the Assistant Secretary's memorandum of 14 June 1968, "Application of a System Approach in the Development and Management of Training Courses." In this he called for "vigorous and imaginative effort," and an approach "characterized by an organized training program with precise goals and defined operational interrelation among instructional system components." He also noted, "Job analyses with task descriptions expressed in behavioristic terms are basic and essential to the development of precise training goals and learning objectives."

### The Project

System survey and analysis was conducted relative to all factors affecting education and training programs. Subsequently, a job-analysis sub-system was defined and developed incorporating a series of task inventories "... expressed in behavioristic terms ..." These inventories enabled the gathering of job activity data from enlisted job incumbents, and data relating to task sharing and delegation from officers of the Medical, Nurse and Dental Corps. A data management sub-system was devised to process incumbent data, then carry out needed analyses. The development of initial competency curricula based upon job analysis was implemented to a level of methodology determination. These methods and curriculum materials constituted a third (instructional) sub-system.

Thus, as originally proposed, a system capability has been developed in fulfillment of expressed needs. The system, however, remains untested and unevaluated. ADO 43-03X called for feasibility test and cost-effectiveness determination. The project was designed to so comply. Test and evaluation through the process of implementation has not proved feasible in the Navy Medical Department within the duration of the project. As designed and developed the system does have "... precise goals and defined operational interrelation among instructional system components." The latter has been achieved in terms of a recommended career structure affording productive, rewarding manpower utilization which bridges manpower training and health care delivery functions.

### Data Management Sub-System

Job analysis, involving the application of comprehensive task inventories to thousands of job incumbents, generates many millions of discrete bits of response data. They can be processed and manipulated only by high speed computer capability using rigorously designed specialty programs. In addition to numerical data base handling, there is the problem of rapidly and accurately manipulating a task statement data base exceeding ten thousand carefully phrased behavioral statements. Through the use of special programs, task inventories are prepared, printouts for special purposes are created following a job analysis application, access and retrieval of both data and tasks are efficiently and accurately carried out, and special data analyses conducted. The collective programs, techniques and procedures comprising this sub-system are referred to as the Navy Occupational Data Analysis Language (NODAL).

### Job Analysis Sub-System

Some twenty task inventory booklets (and associated) response booklets) were the instruments used to obtain job incumbent response data for more than fifty occupations. An inventory booklet contains instructions, formatted questions concerning respondent information ("bio-data"), response dimension definitions, and a list of tasks which may vary in number from a few hundred to more than a thousand per occupational field.

By applying NODAL and its associated indexing techniques, it is possible to assemble modified or completely different inventories than those used in this research. Present inventories were applied about three years ago. While they have been rendered in operational format, they should not be reapplied until their task content is updated.

Response booklets were designed in OPSCAN mode for ease of recording and processing responses.

Overall job analysis objectives and a plan of administration were established prior to inventory preparation, including the setting of provisional sample target sizes. Since overall data attrition was forecast to approximate twenty percent, final sample and sub-sample sizes were adjusted accordingly. Stratified random sampling techniques were used. Variables selected (such as rating, NEC, environment) determined stratifications, together with sub-population sizes. About fifteen percent of large sub-populations were sought while a majority of all members of small sub-populations were sought.

Administration procedures were established with great care for every step of the data collecting process, and were coordinated with sampling and data analysis plans. Once set, the procedures were formalized as a protocol and followed rigorously.



## Instructional Sub-System

Partial "competency curricula" have been composed as an integral sub-system bridging what is required as performance on the job with what is, accordingly, necessary instruction in the training process. Further, curriculum materials were developed to meet essential requirements for implementing the system so that the system could be tested and evaluated for cost effectiveness. However, due to the fact that test and evaluation was not feasible in the Navy Medical Department within the duration of the project, it was not possible to complete the development of the system through the test and evaluation phase. The inability to complete this phase also interrupted the planned process for fully developing the curricula; therefore, instead of completed curricula ready for use in the system, the curricula were partially developed to establish the necessary sub-system methodology. The competency curricula are based on tasks currently performed by job incumbents in 1971. (The currency of a given curriculum depends upon periodic analysis of incumbents' jobs, and its quality control resides in the evaluation of the performance competency of the program's graduates.)

A competency curriculum provides a planned course of instruction or training program made up of sequenced competency units which are, in turn, comprised of sequenced modules. These modules, emphasizing performance objectives, are the foundation of the curriculum.

A complete module would be comprised of seven parts: a cluster of related tasks; a performance objective; a list of knowledges and skills implied by the objective; a list of instructional strategies for presenting the knowledges and skills to the learner; an inventory of training aids for supporting the instructional strategies; a list of examination modes; and a statement of the required training time. In this project, curriculum materials have been developed to various levels of adequacy, and usually comprise only the first three parts; the latter four need to be prepared by the user.

The performance objective, which is the most crucial part of the module, is the basis for determining curriculum content. It is composed of five essential elements: the stimulus which initiates the behavior; the behavior; the conditions under which the behavior takes place; the criteria for evaluating the behavior; and the consequence or results of the behavior. A sixth element, namely next action, is not essential; however, it is intended to provide linkage for the next behavior.

Knowledges and skills listed in the module are those needed by the learner for meeting the requirements of the performance objective.

Instructional strategies, training aids, examination modes and training time have been specified only for the Basic Hospital Corps Curriculum. The strategies, aids and modes were selected on the basis of those considered to be most supportive in presenting the knowledges and skills so as to provide optimum learning effectiveness and training efficiency. The strategies extend from the classroom lecture as traditionally presented by a teacher to the more sophisticated mediated program for self-instruction. The training aids, like strategies, extend from the traditional references and handout material in the form of a student syllabus to mediated programs for self-instruction supported by anatomical models. Examination modes extend from the traditional paper and pencil tests to proficiency evaluation of program graduates on the job, commonly known as feedback. Feedback is essential for determining learning effectiveness and for quality control of a training program. The kind of instructional strategies, training aids and examination modes utilized for training are limited only by such factors as staff capability and training budget.

The training time specified in the Basic Hospital Corps Curriculum is estimated, based upon essential knowledge and skills and program sequence.

The competency curriculum module, when complete, provides all of the requirements for training a learner to perform the tasks set forth in the module. A module may be used independently or related modules may be re-sequenced into modified competency units to provide training for a specific job segment.

Since the curricula are based upon tasks performed by job incumbents in 1971, current analysis of jobs needs to be accomplished using task inventories that have been updated to reflect changes in performed tasks. Subsequent to job analysis, a revision of the curricula should be accomplished to reflect task changes. When the foregoing are accomplished, then faculty and other staff members may be indoctrinated to the competency curricula and to their relationship to the education and training system.

In addition to the primary use for the systematic training of job incumbents, these curricula may be used to plan for new training programs, develop new curricula, and revise existing curricula; develop or modify performance standards; develop or modify proficiency examinations; define billets; credentialize training programs; counsel on careers; select students; and identify and select faculty.

## The System

Three sub-systems, as described, comprise the proposed system for Education and Training Programs in the Navy Medical Department. This exploratory and advanced developmental research has established an overall methodology for improved education and training incorporating every possible means of providing bases for demonstrating feasibility and cost effectiveness. There remains only job analysis sub-system up-dating, instructional sub-system completion, and full system test and evaluation.

## Acknowledgements

The authors wish to acknowledge the invaluable participation of the several thousands of Naval personnel who served as respondents in inventory application. The many military and civilian personnel who contributed to developmental efforts are cited by name in the Final Report.

The authors also wish to acknowledge former colleagues for singularly important contributions, namely, Elias H. Porter, Ph.D., Carole K. Kauffman, R.N., M.P.H., Mary Kay Munday, B.S.N., R.N., Gail Zarren, M.S.W., and Renee Schick, B.A.

Identity and acknowledgement of the project Advisory Group during the project's final year is recorded in the Final Report.

Lastly, the project could not have been commenced nor carried out without the vision, guidance and outstanding direction of Ouida C. Upchurch, Capt., NC, USN, Project Manager.

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EAR, NOSE AND THROAT ASSISTANT

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Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

COMPETENCY UNIT I: CLINICAL ASSISTANCE

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Clinical Procedures Assistance . . . . .	2
2	Preparation of X-Rays for Viewing . . . . .	3

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit I: Clinical Assistance

MODULE 1: CLINICAL PROCEDURES ASSISTANCE

- TASKS
- a. Glove for sterile procedure
  - b. Drape/gown patient for examination/treatment
  - c. Position/hold patient for examination/treatment/surgery
  - d. Explain x-ray procedures to patient
  - e. Prepare local anesthetic solutions for use
  - f. Pour sterile solution, e.g., sterile water, saline
  - g. Hold vials/ampules of drugs for use and drug verification during sterile procedure
  - h. Pass instruments to physician

PERFORMANCE OBJECTIVE

- (Stimulus) Upon physician's orders or in anticipation of physician's needs
- (Behavior) The ENTA will prepare the patient for examination, treatment or surgery and will anticipate the physician's requirements for instruments, supplies and equipment relevant to the particular case
- (Conditions) With limited supervision; using specified sterile materials and related equipment
- (Criteria) In accordance with clinic's standard procedures or physician's standing orders
- (Consequence) Patient prepared for procedure and equipment/instruments used or rendered for use by the physician at the right time and in the right sequence
- (Next Action) Replace and clean equipment used

KNOWLEDGES AND SKILLS

ENT clinical, medical and surgical procedures  
Anatomy of the ear, nose and throat  
Use of required equipment  
Basic sterile technique  
Procedures to pass instruments/equipment to physician  
Preparation of materials for physician's use, e.g., anesthetic solutions, saline solution  
Patient positioning for ENT examination/treatment/surgery

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit I: Clinical Assistance

MODULE 2: PREPARATION OF X-RAYS FOR VIEWING

- TASKS
- a. Identify radiographs
  - b. Prepare radiographs for viewing by physician

PERFORMANCE OBJECTIVE

- (Stimulus) Upon physician's orders or upon arrival in clinic of patient with x-rays
- (Behavior) The ENTA will prepare the x-rays for viewing by the physician
- (Conditions) Without supervision; using a standard radiograph illuminator
- (Criteria) X-rays placed in correct order/sequence as marked on each film
- (Consequence) Aid physician in making a diagnosis and/or treating the patient
- (Next Action) When physician is finished, take the x-rays down and replace in storage envelope

KNOWLEDGES AND SKILLS

- Identification of x-rays by patient number
- Use and operation of illuminator
- Proper placement of x-rays for viewing (RT, LT, Top, Bottom)
- Proper sequencing of x-rays



Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

COMPETENCY UNIT II: CLINICAL INSTRUMENTS

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
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2	Trays/Set Preparation . . . . .	6
3	Instrument Cleaning . . . . .	7

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit II: Clinical Instruments

MODULE 1: INSTRUMENT PREPARATION

TASKS                   a. Set up/arrange instruments/equipment  
                          b. Assist physician in routine ENT examination

PERFORMANCE OBJECTIVE

(Stimulus)           On physician's orders and/or on arrival of a patient  
                          for clinical examination  
(Behavior)           The ENTA will set out/arrange instruments needed  
                          by the physician for routine examination of patient,  
                          and assist physician with examination by passing  
                          and lighting alcohol lamp  
(Conditions)         Without supervision; using laryngeal mirror, nasal  
                          speculum, ear speculum, tongue blades, 4x4 gauze,  
                          alcohol lamp, and nasopharyngoscope  
(Criteria)           According to physician's standard procedures  
(Next Action)       Clean and restock unit and instruments and prepare  
                          for next patient

KNOWLEDGES AND SKILLS

Procedures involved in routine ENT examination  
Instruments used in routine ENT examination, e.g.,  
    laryngeal mirror, nasal speculum, ear speculum,  
    tongue blades, nasopharyngoscope, alcohol lamp,  
    4x4 gauzes  
Passing of instruments according to their use

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit II: Clinical Instruments

MODULE 2: TRAYS/SET PREPARATION

- TASKS
- a. Set up instruments/sets for minor surgical procedures
  - b. Pass instruments to physician

PERFORMANCE OBJECTIVE

- (Stimulus) On physician's orders  
(Behavior) The ENTA will set up particular instruments/sets required for specific minor surgical procedures, e.g., peritonsillar abscess, maxillary sinus drainage, nasal fracture, salivary duct dilation, biopsy, and assist the physician by passing instruments  
(Conditions) Without supervision; using required instruments  
(Criteria) According to type of procedure and physician's preference  
(Consequence) The correct instruments for the particular procedure are properly set up and the physician is adequately assisted  
(Next Action) Clean unit; tear down instrument sets; clean instruments; make up pack; sterilize

KNOWLEDGES AND SKILLS

ENT minor surgical procedures  
Selection of appropriate set of instruments  
Setting up and arranging instruments/trays for physician's use, e.g., incision drainage tray, peritonsillar abscess tray, millimeter punches for biopsy, salivary duct dilator, nasal fracture set

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit II: Clinical Instruments

MODULE 3: Instrument Cleaning

TASKS                   a. Wash glassware/instruments  
                         b. Disinfect instruments/equipment  
                         c. Sterilize instruments/equipment

PERFORMANCE OBJECTIVE

(Stimulus)           Upon receipt of dirty/used instruments  
(Behavior)           The ENTA will wash, disinfect/sterilize and return  
                         them to the units for use  
(Conditions)          Without supervision; using a sterilizer  
(Criteria)            Scrub all instruments with brush and disinfectant  
                         soap to remove waste material, e.g., purulent  
                         drainage, blood; sterilize for ten minutes to kill  
                         most commonly occurring bacteria  
(Consequence)       Glassware/instruments/equipment cleaned, disinfected/  
                         sterilized and ready for use

KNOWLEDGES AND SKILLS

Basic sterilization technique  
Department instrument cleaning procedures  
Use and operation of sterilizing equipment

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

COMPETENCY UNIT III: MEDICATIONS

This unit includes the following module:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Medication Administration . . . . .	9

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit III: Medications

MODULE 1: MEDICATION ADMINISTRATION

- TASKS
- a. Check drugs for visible contamination/deterioration
  - b. Check ordered medications for overdosage and contraindications
  - c. Ask patient/check chart for contraindication for treatment/procedure/test
  - d. Administer medications

PERFORMANCE OBJECTIVE

- (Stimulus) Upon physician's orders  
(Behavior) The ENTA will check for overdose, contraindications and drug deterioration and administer the specified ear, nose, and/or throat medication  
(Conditions) Without supervision; using appropriate medication, e.g., decongestant, antibiotic  
(Criteria) According to standard ENT administration techniques  
(Consequence) The appropriate drug administered correctly in accordance with action, use, dosage, contraindications

KNOWLEDGES AND SKILLS

Use, dosage and contraindications for ENT drugs  
Recognition of signs of drug deterioration  
Recognition of symptoms of adverse drug reactions  
Procedures for administration of ENT medications  
Recognition of signs of drug contamination

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

COMPETENCY UNIT IV: PATIENT CARE

This unit includes the following modules:

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2	Wound Care . . . . .	12
3	Dressings . . . . .	13

Unit IV: Patient Care

**TASKS**                      a. Teach patient/family nursing care procedures,  
e.g., dressing change, cast care

(Stimulus)	Upon physician's orders or patient inquiry
(Behavior)	The ENTA will instruct patient or family in home-care procedures, e.g., keeping water out of ears, changing dressings, cleaning post-operative site
(Conditions)	Without direct supervision; using appropriate equipment
(Criteria)	In accordance with physician's orders and patient's condition
(Consequence)	Patient/family able to perform post-operative care

- Post-operative tracheostomy care
- Post-operative laryngectomy care
- Post-operative ear care, i.e., mastoid, P.E. tubes
- Post-operative radical neck care
- Instructional techniques



Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit IV: Patient Care

MODULE 2: WOUND CARE

- TASKS
- a. Debride wound/burn
  - b. Clean wound/cut/abrasion
  - c. Observe/record or describe characteristics of drainage from incisions/wounds
  - d. Observe for/report symptoms of cellulitis
  - e. Observe for/report symptoms of wound infection
  - f. Irrigate wound
  - g. Remove sutures

PERFORMANCE OBJECTIVE

- |               |   |
|---------------|---|
| (Stimulus)    | Upon physician's orders   |
| (Behavior)    | The ENTA will perform appropriate wound care  |
| (Conditions)  | Without direct supervision; using material from dressing tray, cart, kit  |
| (Criteria)    | In accordance with physician's orders and/or clinic routine, maintaining sterile or surgically clean conditions |
| (Consequence) | This action will provide for quicker healing of patient's wounds  |

KNOWLEDGES AND SKILLS

- Sterile technique
- Use of dressings and bandages
- Suture removal technique
- Techniques for cleaning, debriding, irrigating wounds/burns
- Recognition of symptoms of cellulitis and wound infection

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit IV: Patient Care

MODULE 3: DRESSINGS

- TASKS
- a. Apply/change sterile dressings
  - b. Check dressings, e.g., for cleanliness
  - c. Apply/change bandages, e.g., roller, triangular, kurlex
  - d. Reinforce dressings, i.e., add dressings

PERFORMANCE OBJECTIVE

- (Stimulus) On physician's orders  
(Behavior) The ENTA will apply and change sterile dressings  
(Conditions) Without supervision; using necessary dressing material, e.g., gauze, tape  
(Criteria) Change/apply dressing according to type and location of wound and physician's preference, maintaining sterile technique  
(Consequence) Prevention of wound infection

KNOWLEDGES AND SKILLS

- Sterile technique
- Procedures and techniques for applying/changing dressings
- Procedures and techniques for applying/changing bandages

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

COMPETENCY UNIT V: PATIENT PREPARATION FOR SURGERY

This unit includes the following module:

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1	Surgical Preparation . . . . .	15

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit V: Patient Preparation for Surgery

MODULE 1: SURGICAL PREPARATION

TASKS

- a. Prepare ear for surgery
- b. Prepare nose for surgery
- c. Shave and scrub patient for surgery
- d. Ascertain if patient has been prepped for test/  
treatment procedure

PERFORMANCE OBJECTIVE

(Stimulus)	When ordered by the physician
(Behavior)	The ENTA will prepare a patient for surgery by cutting/shaving hair on and around the surgical area
(Conditions)	Without supervision; using scissors/razor
(Criteria)	According to physician's specifications
(Consequence)	The patient will be properly prepped for surgery, thereby reducing the possibility of infection

KNOWLEDGES AND SKILLS

Standard ENT prepping procedures, e.g., clipping/  
shaving, scrubbing

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

COMPETENCY UNIT VI: FACIAL NERVE STIMULATION

This unit includes the following module:

<u>Number</u>	<u>Title</u>	<u>Page</u>
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Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit VI: Facial Nerve Stimulation

MODULE 1: FACIAL NERVE STIMULATION

TASKS a. Give facial nerve stimulation treatment

PERFORMANCE OBJECTIVE

(Stimulus)	Upon physician's orders
(Behavior)	The ENTA will give facial nerve stimulation treatments
(Conditions)	Using the Helger facial nerve stimulator and accessories
(Criteria)	According to physician's specifications for the amount of electrical stimulation and duration of treatment
(Consequence)	Improved facial muscle tone; patient's eventual full recovery from paralysis of the facial muscles

KNOWLEDGES AND SKILLS

Cranial nerve anatomy  
Facial anatomy  
Use and operation of Helger facial nerve stimulator and accessories  
Calculation and administration of electrical current  
Safety precautions

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

COMPETENCY UNIT VII: EMERGENCY TREATMENT

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Observation for Adverse Drug Reaction . . . .	19
2	Emergency Treatment for Drug Reaction . . . .	20
3	Control of Epistaxis . . . . .	21
4	Post-Operative Tonsil and Adenoid Hemorrhage . . . . .	22

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit VII: Emergency Treatment

MODULE 1: OBSERVATION FOR ADVERSE DRUG REACTION

- TASKS
- a. Observe/report symptoms of side effects to treatment/medications
  - b. Observe for/report or describe symptoms of irritability, restlessness, apprehension
  - c. Check patient for sweating
  - d. Observe patient for signs of chilling
  - e. Observe patient for signs of fainting
  - f. Observe patient for cyanosis
  - g. Observe patient for respiratory difficulty

PERFORMANCE OBJECTIVE

- (Stimulus) Following administration of a medication, e.g., Xylocaine, epinephrine, by the physician
- (Behavior) The ENTA will observe the patient for adverse reactions
- (Conditions) Without supervision
- (Consequence) Recognition of adverse drug reactions
- (Next Action) Initiate emergency treatment, if necessary

KNOWLEDGES AND SKILLS

Medication used

Recognition of adverse reactions to various anesthetics, vasoconstrictor, epinephrine, e.g., chilling, fainting, cyanosis, respiratory difficulty



Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit VII: Emergency Treatment

MODULE 2: EMERGENCY TREATMENT FOR DRUG REACTION

- TASKS
- a. Determine need for emergency equipment/medications
  - b. Initiate treatment procedures in absence of physician
  - c. Suction trachea, i.e., deep endotracheal suction
  - d. Answer inquiries regarding drug reaction

PERFORMANCE OBJECTIVE

- (Stimulus) In physician's absence, when a patient has an adverse drug reaction
- (Behavior) The ENTA will determine the need for and initiate/perform emergency measures to prevent respiratory arrest
- (Conditions) Without supervision; using breathing apparatus, endotracheal tube, suction machine, drugs from emergency drug kit
- (Consequence) Prevention of respiratory arrest
- (Next Action) Get assistance

KNOWLEDGES AND SKILLS

Drug used, e.g., anesthetic, vasoconstrictor  
Emergency resuscitation procedures  
Endotracheal intubation procedures  
Location of emergency equipment  
Suctioning procedures  
Use and operation of equipment, e.g., oxygen cylinder/tank (portable), Ambu bag (Hope bag), inhalator-aspirator (resuscitator), endotracheal tube, endotracheal tray, emergency drug kit, suction machine (wall unit)

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit VII: Emergency Treatment

MODULE 3: CONTROL OF EPISTAXIS

- TASKS
- a. Determine need for emergency equipment/medication
  - b. Initiate treatment procedures in the absence of a physician
  - c. Suction nasal/oral passages
  - d. Insert anterior nasal packing

PERFORMANCE OBJECTIVE

- (Stimulus) In the physician's absence, upon arrival of a patient with nasal hemorrhage
- (Behavior) The ENTA will determine the need for and initiate emergency treatment
- (Conditions) Without supervision; using appropriate equipment, e.g., nasal speculum, nasal bleeder tray, bayonet forceps, emesis basin, head mirror, vasoconstrictors, gauze packing, suction machine (wall unit)
- (Criteria) According to the physician's standard procedures; using judgment and skill in controlling nasal hemorrhage
- (Consequence) Control of bleeding from anterior nasal area
- (Next Action) Notify physician; arrange for further treatment

KNOWLEDGES AND SKILLS

First aid procedures for bleeding  
Function and use of ENT instruments, e.g., nasal speculum, bayonet forceps, emesis basin, vasoconstrictors  
Anatomy of the nose  
Use of head mirror/reflected light  
Use/action of medications and cautery agents  
Use of silver nitrate cautery sticks and anterior nasal packing  
Suctioning procedures for nasal/oral passage

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit VII: Emergency Treatment

MODULE 4: POST-OPERATIVE TONSIL AND ADENOID HEMORRHAGE

- TASKS
- a. Ground patient, e.g., for electrical cauterization
  - b. Arrange furniture/set up equipment/supplies for procedure
  - c. Assist physician in controlling bleeding

PERFORMANCE OBJECTIVE

- (Stimulus) On physician's orders and/or arrival of patient with post-operative bleeding
- (Behavior) The ENTA will set up instruments and equipment and assist the physician in treating bleeding from the throat
- (Conditions) Without supervision; using sterile gloves, sterile instruments, anesthetic, cautery apparatus, suctioning equipment
- (Criteria) In accordance with physician's orders and/or standard procedures
- (Consequence) Control/stoppage of post-operative tonsil and adenoid bleeding
- (Next Action) Return patient to home or ward

KNOWLEDGES AND SKILLS

Sterile technique  
Use and operation of required instruments and equipment, e.g., tonsil bleeder tray, head mirror, suction machine (wall unit), cautery apparatus  
Location of supplies

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

COMPETENCY UNIT VIII: EAR EXAMINATION AND TREATMENT

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Ear Examination . . . . .	24
2	Removal of Foreign Material from the Ear Canal . . . . .	25

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit VIII: Ear Examination and Treatment

MODULE 1: EAR EXAMINATION

TASKS

- a. Examine tympanic membrane for perforation
- b. Examine ear for excess wax
- c. Observe/record or describe characteristics of ear

PERFORMANCE OBJECTIVE

(Stimulus)	Upon physician's orders
(Behavior)	The ENTA will examine the patient's ears
(Conditions)	Without direct supervision; using an otoscope with speculum
(Criteria)	Noting the physical conditions and appearance of the ear canal, e.g., drainage, excess or foreign material, and of tympanic membrane, e.g., clarity of landmarks, perforations
(Next Action)	Wash out ears and/or remove foreign/excess material, if necessary

KNOWLEDGES AND SKILLS

- Anatomy and function of the external and middle ear
- Use and function of ear examination equipment, e.g., otoscope with speculum
- Ear examination techniques
- Diseases and conditions of the ears

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit VIII: Ear Examination and Treatment

MODULE 2: REMOVAL OF FOREIGN MATERIAL FROM THE EAR CANAL

TASKS                   a. Irrigate ears  
                         b. Remove superficial material from ear canal

PERFORMANCE OBJECTIVE

(Stimulus)	Upon physician's orders
(Behavior)	The ENTA will remove excess or foreign material from the ear canal by irrigation and/or with forceps
(Conditions)	Without direct supervision; using standard equipment/materials, e.g., ear wash cup, towel, ear syringe, alcohol, peroxide, small cup/alligator forceps, wire loop
(Consequence)	Removal of foreign/excess material from the ear canal
(Next Action)	Dry external ear; clean and store equipment used

KNOWLEDGES AND SKILLS

Use of irrigation equipment  
Techniques to remove excess/foreign material from ear canal

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

COMPETENCY UNIT IX: THROAT TREATMENT

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Post-Operative Tonsil Care . . . . .	27
2	Mouth Irrigation . . . . .	28
3	Throat Gargles . . . . .	29
4	Tracheostomy Care . . . . .	30

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit IX: Throat Treatment

MODULE 1: POST-OPERATIVE TONSIL CARE

TASKS a. Give ice pack treatment

PERFORMANCE OBJECTIVE

(Stimulus)	Upon physician's orders
(Behavior)	The ENTA will place an ice pack securely around the patient's neck
(Conditions)	Without supervision; using a prefilled, frozen rubber ice collar
(Consequence)	Constriction of the blood vessels of the anterior neck to aid in controlling pain
(Next Action)	Have patient go to bed and rest

KNOWLEDGES AND SKILLS

Use, placement and securing of collar on anterior neck  
Post-operative tonsil and adenoid care techniques



Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit IX: Throat Treatment

MODULE 2: MOUTH IRRIGATION

TASKS a. Irrigate mouth/oral cavity

PERFORMANCE OBJECTIVE

(Stimulus)	Upon physician's orders
(Behavior)	The ENTA will give the patient materials to irrigate his oral cavity and instruct him in oral irrigation procedures
(Conditions)	Using cup/glass and saltwater, mouth wash, or peroxide depending on reason for irrigation
(Consequence)	Removal of excess/foreign materials, e.g., blood, purulent drainage, and/or treatment of sores in oral cavity

KNOWLEDGES AND SKILLS

Disease and conditions of the oral cavity/throat  
Irrigating solutions  
Techniques to irrigate oral cavity  
Patient instruction techniques

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit IX: Throat Treatment

MODULE 3: THROAT GARGLES

TASKS a. Give throat irrigation gargle

PERFORMANCE OBJECTIVE

(Stimulus)	Upon physician's orders
(Behavior)	The ENTA will give the patient materials with which to gargle and instruct him in gargling procedures
(Conditions)	Using cup/glass of solution, e.g., saltwater, mouthwash
(Consequence)	Aid in treatment of throat infections
(Next Action)	Determine need for additional treatment

KNOWLEDGES AND SKILLS

Diseases/conditions treated by gargling  
Gargling solutions  
Gargling procedures  
Instructional techniques

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit IX: Throat Treatment

MODULE 4: TRACHEOSTOMY CARE

- TASKS
- a. Give tracheostomy care, e.g., remove and clean inner cannula, suction, inflate/deflate cuff
  - b. Change tracheostomy tube

PERFORMANCE OBJECTIVE

- (Stimulus) Upon physician's orders  
(Behavior) The ENTA will provide tracheostomy care, e.g., remove, clean and reinsert tracheal tube/inner cannula, and suction patient with tracheostomy  
(Conditions) Without direct supervision; using cannula, peroxide, tracheal tube, suction catheter  
(Criteria) Removing/reinserting the inner cannula very gently without making the patient cough or causing further discomfort  
(Consequence) The inner cannula and immediate tracheal area will be free from mucous and the patient will be able to breathe better

KNOWLEDGES AND SKILLS

Tracheal anatomy and function  
Tracheal tube parts/functions  
Dressing technique  
Use of suction apparatus  
Tube cleaning solutions

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

COMPETENCY UNIT X: AUDIOMETRIC TEST PREPARATION

This unit includes the following module:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Patient Instruction . . . . .	32

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit X: Audiometric Test Preparation

MODULE 1: PATIENT INSTRUCTION

- TASKS
- a. Observe for/describe hearing disturbances, e.g., ringing, hearing loss
  - b. Plan/modify diagnostic procedures according to patient's response/need
  - c. Explain audiogram test procedures to patient

PERFORMANCE OBJECTIVE

- |               |  |
|---------------|--|
| (Stimulus)    | Preceding and during an audio exam   |
| (Behavior)    | The ENTA will instruct and advise the patient on the testing procedure, changes in procedure, equipment patient will use and response procedures |
| (Conditions)  | Using appropriate audiometric equipment  |
| (Criteria)    | The patient will thoroughly understand how to respond to the exam stimulus   |
| (Consequence) | An accurate and reliable exam  |
| (Next Action) | Perform basic audio exam   |

KNOWLEDGES AND SKILLS

Patient's past history  
Operation of audio equipment  
Audiometric testing procedures  
Tests to be performed  
Marking procedure

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

COMPETENCY UNIT XI: PURE TONE AUDIOMETRY

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Air Conduction Testing . . . . .	34
2	Bone Conduction Testing . . . . .	35

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit XI: Pure Tone Audiometry

MODULE 1: AIR CONDUCTION TESTING

TASKS a. Take air conduction audiogram

PERFORMANCE OBJECTIVE

(Stimulus)	After properly instructing the patient
(Behavior)	The ENTA will perform an air conduction test sequentially in each ear and record the results on the audiograph test sheet
(Conditions)	In a sound resistant room using standard audio equipment
(Criteria)	Accurately, according to established testing techniques
(Consequence)	Determination and recording of the patient's air conduction threshold, with or without marking, for the physician's use in diagnosing and/or treating the patient
(Next Action)	Determine if other tests are needed or return the patient to physician

KNOWLEDGES AND SKILLS

Use and operation of audio equipment and accessories  
Methods of recording results  
Air conduction testing techniques  
Marking procedures  
Audio terminology, signs and symbols  
Patient instruction techniques  
Equipment set-up/preparation requirements and procedures

Competancy: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit XI: Pure Tone Audiometry

MODULE 2: BONE CONDUCTION TESTING

TASKS a. Take bone conduction audiogram

PERFORMANCE OBJECTIVE

(Stimulus)	Upon completion of air conduction testing
(Behavior)	The ENTA will perform a bone conduction test in each ear and record the results on an audiograph test sheet
(Conditions)	In a sound resistant room; using standard audio equipment
(Criteria)	Accurately, according to standard testing procedures
(Consequence)	Determination and recording of the patient's bone conduction threshold, with or without marking, will provide accurate and valid information for the physician's use in determining, diagnosing and treating a sensory-neural hearing loss
(Next Action)	Determine if further testing is needed or return patient to physician

KNOWLEDGES AND SKILLS

- Use of bone conduction audio equipment and accessories
- Patient instruction techniques
- Bone conduction testing technique
- Equipment set-up/preparation requirements and procedures
- Marking technique
- Recording methods
- Oscillator placement



Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

COMPETENCY UNIT XII: SPEECH AUDIOMETRY

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Speech Reception Threshold Testing . . . . .	37
2	Speech Discrimination Testing . . . . .	38

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit XII: Speech Audiometry

MODULE 1: SPEECH RECEPTION THRESHOLD TESTING

- TASKS
- a. Give speech reception threshold test using own modulated voice
  - b. Give speech reception threshold test using recorded sound
  - c. Play records/tapes for speech reception threshold testing
  - d. Record speech reception threshold test score

PERFORMANCE OBJECTIVE

- (Stimulus) Upon completion of pure tone testing and/or upon physician's orders
- (Behavior) The ENTA will perform a speech reception threshold test and record results in decibels on audiograph test sheet
- (Conditions) Without direct supervision; in a sound resistant room; using standard audio equipment and own modulate or recording
- (Criteria) The patient must respond by repeating each word correctly
- (Consequence) Determination of a patient's threshold for spoken voice, providing accurate and valid information for physician's use in diagnosing/testing a hearing loss
- (Next Action) Perform further diagnostic tests

KNOWLEDGES AND SKILLS

Use and function of audio equipment and accessories  
Speech reception threshold testing techniques  
Recording procedures  
Patient instruction techniques  
Equipment set-up/preparation requirements and procedures

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit XII: Speech Audiometry

MODULE 2: SPEECH DISCRIMINATION TESTING

- TASKS
- a. Give speech discrimination test using recorded sounds
  - b. Give speech discrimination test using own modulated voice
  - c. Record speech discrimination test scores

PERFORMANCE OBJECTIVE

- (Stimulus) Upon completion of pure tone testing and/or upon physician's orders
- (Behavior) The ENTA will perform a speech discrimination test and record the results in percent on the audiograph test sheet
- (Conditions) Without direct supervision; in a sound resistant room; using standard audio testing equipment
- (Criteria) The patient must respond by repeating each word
- (Consequence) This test will determine patient's discriminatory hearing and provide the physician with valid and accurate information for use in diagnosing and treating a hearing loss
- (Next Action) Perform further diagnostic audio testing

KNOWLEDGES AND SKILLS

Use and function of appropriate audio equipment and accessories  
Speech discrimination testing techniques  
Recording procedures for test results  
Patient instruction techniques  
Equipment set-up/preparation requirements and procedures

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

COMPETENCY UNIT XIII: DIAGNOSTIC AUDIO EXAMS

This unit includes the following modules:

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1	Tone Decay Exam . . . . .	41
2	Short Increment Sensitivity Index (SISI) Exam . . . . .	42
3	Bekesey Test . . . . .	43
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5	Psychogalvanic Skin Response (PGSR) . . . . .	45
6	Electronystagmograph (ENG) . . . . .	46
7	Automatic Audio Exam . . . . .	47

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit XIII: Diagnostic Audio Exams

MODULE 1: TONE DECAY EXAM

TASKS                   a. Perform tone decay test  
                         b. Record tone decay test results

PERFORMANCE OBJECTIVE

(Stimulus)           On physician's orders  
(Behavior)           The ENTA will perform a tone decay exam and record the results  
(Conditions)          Without supervision; in a sound resistant booth; using the manual audiometer and accessories, e.g., head set, patient response button, audiogram test sheet and pen  
(Criteria)           In accordance with established techniques and audiometer test manual  
(Consequence)       Determination of weakness in the patient's cochlea at certain frequencies, providing information for the physician's use in diagnosing hearing problems  
(Next Action)       Refer back to physician

KNOWLEDGES AND SKILLS

Basic audiometry  
Operation and calibration of audiometer for tone decay testing  
Patient instruction techniques  
Frequency and intensity measurements  
Principles and procedures of tone decay testing  
Recording techniques  
Equipment set-up/preparation requirements and procedures

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit XIII: Diagnostic Audio Exams

MODULE 2: SHORT INCREMENT SENSITIVITY INDEX (SISI) EXAM

TASKS                    a. Perform sensitivity sound increment (SISI) test  
                         b. Record SISI exam results

PERFORMANCE OBJECTIVE

(Stimulus)            On physician's orders and after properly instructing the patient  
(Behavior)            The ENTA will perform a short increment sensitivity index (SISI) test and record test results  
(Conditions)           In a sound proof booth; using the manual audiometer with SISI adaptor and audio accessories, e.g., headset, patient response button, audio recording sheet with pen  
(Criteria)            Properly instruct patient; accurately set machine dials; test performed according to standard established techniques, e.g., frequency, intensities  
(Consequence)        SISI test results will provide information for physician's use in diagnosis and treatment  
(Next Action)        Refer patient back to physician

KNOWLEDGES AND SKILLS

Operation of an audiometer and SISI adaptor  
Instructional techniques  
Frequency and intensity measurements, i.e.,  
H<sub>2</sub>--dB  
Principles, techniques and purposes of SISI testing  
Head set positioning techniques  
Equipment set-up/preparation requirements and procedures

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit XIII: Diagnostic Audio Exams

MODULE 3: BEKESEY TEST

TASKS                   a. Perform Bekesey audiometer exam  
                         b. Determine type of hearing loss

PERFORMANCE OBJECTIVE

(Stimulus)	On physician's orders and after appropriate patient instruction
(Behavior)	The ENTA will perform a Bekesey audiometer test and determine type of hearing loss, i.e., type I, II, III, IV or V
(Conditions)	Without supervision; in a sound resistant booth; using a standard Bekesey audiometer
(Criteria)	Testing each ear sequentially; performing test within 30 minutes
(Consequence)	Determination of type and location of hearing loss, providing information for diagnosis and treatment
(Next Action)	Return patient to the physician

KNOWLEDGES AND SKILLS

Intensity and frequency measurements  
Science of sound and hearing  
Anatomy and function of hearing mechanisms  
Types of Bekesey tracings  
Bekesey audiometer operation  
Principles, techniques and function of Bekesey testing  
Patient instruction techniques  
Equipment set-up/preparation requirements and procedures

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit XIII: Diagnostic Audio Exams

MODULE 4: STENGER TEST

TASKS                   a. Perform Stenger test for hearing loss  
                         b. Record Stenger test results

PERFORMANCE OBJECTIVE

(Stimulus)           On physician's orders  
(Behavior)           The ENTA will perform a Stenger audiometric exam  
                         and record the results on audiogram test sheet  
(Conditions)       Without supervision; in a sound resistant booth;  
                         using the standard two-channel manual audiometer,  
                         pen and audiograph sheet  
(Criteria)           According to manufacturer's established procedures  
                         for Stenger testing; only performed on patients  
                         with unilateral hearing losses and on a two-  
                         channel audiometer  
(Consequence)      The Stenger test will prove or disprove functional  
                         or nonfunctional hearing loss  
(Next Action)       Return to physician for further evaluation

KNOWLEDGES AND SKILLS

Sound cross-over  
Principles and techniques of Stenger testing  
Use and operation of a two-channel manual  
    audiometer  
Instructional techniques  
Equipment set-up/preparation requirements and  
    procedures



Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit XIII: Diagnostic Audio Exams

MODULE 5: PSYCHO GALVANIC SKIN RESPONSE (PGSR) EXAM

TASKS                      a. Take psychogalvanic skin response (PGSR) audiogram

PERFORMANCE OBJECTIVE

(Stimulus)	On physician's orders
(Behavior)	The ENTA will perform a PGSR examination and accurately record findings
(Conditions)	Without assistance or supervision; in a sound resistant booth; using head set, manual audiometer, PGSR machine and accessories, e.g., skin leads
(Criteria)	In accordance with PGSR procedure manual
(Consequence)	Test results verify or disprove patient's hearing loss (functional vs. nonfunctional) or establish hearing thresholds for infants
(Next Action)	Return to physician for further evaluation

KNOWLEDGES AND SKILLS

Anatomy and physiology of ear  
Instructional techniques  
Basic theory of psychogalvanic responses  
Function and operation of psychogalvanometer and manual audiometer  
Audio measurements  
Equipment set-up/preparation requirements and procedures  
Procedures to affix leads to patient  
Procedures to record results on automatic recording graph paper

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit XIII: Diagnostic Audio Exams

MODULE 6: ELECTRONYSTAGMOGRAPH (ENG)

TASKS                   a. Perform electronystagmography  
                         b. Calculate ENG test results

PERFORMANCE OBJECTIVE

(Stimulus)           Upon physician's orders  
(Behavior)           The ENTA will perform an ENG--vestibular exam  
(Conditions)          Without supervision but with assistance; using an  
                         ENG recording machine, hot/cold water bath, caloric  
                         test equipment  
(Criteria)           In accordance with "current" test procedures  
                         and physician's preferences  
(Consequence)       Determination of labyrinthine functions or  
                         dysfunctions in each ear by measuring stimulated  
                         nystagmus  
(Next Action)       Return to physician for further evaluation

KNOWLEDGES AND SKILLS

Equilibrium mechanisms  
Function and operation of ENG equipment  
Calculation of ENG tracings  
Instructional techniques  
Equipment set-up/preparation requirements and  
procedures

Competency: EAR, NOSE AND THROAT ASSISTANT (ENTA)

Unit XIII: Diagnostic Audio Exams

MODULE 7: AUTOMATIC AUDIO EXAM

TASKS a. Perform automatic audiometric exam

PERFORMANCE OBJECTIVE

(Stimulus)	On physician's orders and after properly instructing the patients
(Behavior)	The ENTA will perform quantitative hearing tests
(Conditions)	Without supervision or assistance; using standard automatic audiometers, the 6-, 10-, 15-position sound resistant booth, depending on number of people being tested and designated use
(Consequence)	Determination of normal or gross hearing losses for groups of people
(Next Action)	If hearing loss is found, refer for qualitative audio testing

KNOWLEDGES AND SKILLS

Principles and techniques of automatic audiometric examination  
Instructional techniques  
Equipment set-up/preparation requirements and techniques